

997604 P+DS

FEB 12 8 18 AM '65

FEB 12

NPIC PROJECT NO.

Confidential
CLASSIFICATION

RECEIPT OCB/OS

DISSEMINATED OCB/OS

SUPPORT/SERVICE REQUIREMENT

(The following info is required when rqmts are levied by external organizations)

OFFICE _____ DATE OF RQMT _____ CONTROL NO. _____

NPIC DIV/DETACH PROCESSING RQMT _____ PROJ OFF _____ PHONE _____

SUPPORT REQUESTED OF _____ PRIORITY _____ DATE REQUIRED _____

(The following info is required when rqmts are levied for internal support)

DIV/STAFF P&DS _____ DATE OF RQMT 11 FEB 1965 _____ CONTROL NO. _____

SUPPORT REQUESTED OF P&DS _____ PROJ OFF _____ 25X1

PRIORITY _____ DATE REQUIRED 30 September 1966

1. BACKGROUND INFORMATION:

- The work requested is in support of a departmental: ☐ Photo interpretation proj.;
- ☐ Non-photo interpretation project. It will result in: ☐ Hard copy report;
- ☐ Informal report (memo); ☒ Basic service only.

Project Description: Film Processor Development Program

2. SPECIFIC SUPPORT/SERVICE REQUESTED: Support from NPIC will probably consist of:

☐ Photographs; ☐ Reproduction; ☐ Mensuration; ☐ Graphics; ☐ ADP; ☐ Editing;

☒ Other (explain below) -- (Include statement as to estimated amount of work required support component(s); i.e., number of contact prints, enlargements, boards, etc.)

1. Solicite and evaluate proposal
2. Recommend action
3. Monitor contract
4. Prepare final report

25X1

3. URGENCY JUSTIFICATION: (If immediate support is required a statement of justification must be made on this form.)

DATE OF COMPLETION _____

Declass Review by NIMA/DOD

Confidential
CLASSIFICATION

NPIC FM 218 (4-64)

997604

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TECHNICAL BACKGROUND PROCUREMENT INFORMATION

I. Contractor

B. Evaluation of previous performance: Very Good

II. Brief description of this procurement: Continuation of Contract

STAT

Estimated total amt

STAT

A. Deliverable items:

~~Study Effort -- Technical Reports~~

~~Final Report~~

B. Is this procurement for other than a standard, "off the shelf" or slightly modified commercial item? No If "yes", is it anticipated that any more of this unit will be procured? No If so, a complete set of directly reproducible manufacturing drawings and specifications would normally be included in this procurement. Comments: N/A

C. Will contract cover a period of more than 90 days? Yes
If "yes", are progress reports desired? Yes If so, indicate frequency, content and number of copies desired:

~~a. Monthly on progress and finances (3)~~

~~b. Technical as deemed significant (3)~~

~~c. Final (3)~~

D. Is any Government-owned property to be provided to the contractor?

Yes If so, list and indicate its availability (where, when, etc.)

~~Clean room facility already installed under previous contract.~~

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E. Is any special tooling involved? No

F. Security:

1. Association with the Sponsor is Confidential
2. The specifications and/or drawings are Unclassified
3. The item is Unclassified
4. Contractor personnel known to be aware of this proposed procurement:

25X1

5. Other security information

III. Reasons for selection of this source. If other sources were considered, indicate results. If no other sources were considered, list the reasons why this firm is considered to be uniquely qualified to perform this work.

Continuation of existing contract. Technically unwise and financially unsound to transfer effort at this time.

IV. If contract will cover deliverable item(s) state room location where equipment will be installed N/A. (It is extremely important that the Engineering Data Sheet including room location and any other pertinent facts be submitted to NPIC Engineering Section as far as possible in advance of delivery.)

25X1

V. Technical contact

In the event additional _____, with a reference to the item number to which the comment applies.

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R & D CATALOG FORM		DATE
1. PROJECT TITLE/CODE NAME Film Processor Development Program		5 March 1965
2. SHORT PROJECT DESCRIPTION Continuation of the Processor Development Program to achieve conceptual and engineering advancement in the art and technology of film processing.		
3. <div style="border: 1px solid black; height: 30px; width: 100%;"></div>		
5. CLASS OF CONTRACTOR Manufacturer		6. TYPE OF CONTRACT CPFF
7. FUNDS FY 1964 <div style="border: 1px solid black; width: 100px; height: 20px;"></div>		8. REQUISITION NO. N/A
FY 1965 <div style="border: 1px solid black; width: 100px; height: 20px;"></div>		9. BUDGET PROJECT NO. NP-S-20
FY 19 \$		10. EFFECTIVE CONTRACT DATE (Begin - end) June 1965 - December 1965
11. SECURITY CLASS. AA - Confidential T - Unclassified W - Unclassified		
12. RESPONSIBLE DIRECTORATE/OFFICE/PROJECT OFFICER TELEPHONE EXTENSION DDI/NPIC/P&DS/ <div style="border: 1px solid black; width: 100px; height: 20px;"></div>		
13. REQUIREMENT/AUTHORITY Effort is directed toward providing both theoretical and conclusive answers to many of the unknown factors in the design and engineering of photographic film processors.		
14. TYPE OF WORK TO BE DONE Applied Research		
15. CATEGORIES OF EFFORT		
MAJOR CATEGORY Special Techniques and Studies		SUB-CATEGORIES Reproduction Processors
16. END ITEM OR SERVICES FROM THIS CONTRACT/IMPROVEMENT OVER CURRENT SYSTEM, EQUIPMENT, ETC. Monthly letter progress reports, technical reports at significant stages and final report covering all aspects investigated, conclusions and recommendations.		
17. SUPPORTING OR RELATED CONTRACTS (Agency & Other)/COORDINATION Coordination with NRO, DOD, USAF, SPPL, GIMRADA and NRTSC has been effected.		
18. DESCRIPTION OF INTELLIGENCE REQUIREMENT AND DETAILED TECHNICAL DESCRIPTION OF PROJECT (Continue on additional page if required) This investigative effort is directed toward providing theoretical as well as practical results in specified areas of research pertaining to continuous roll photographic film processors. The program, as instituted in June 1964, was to perform elementary studies, based in installation of a GFE clean-room facility and utilization of a GFE HTA/5 film processor. Because of the normal acquisition and installation required for a clean-room complex, considerable investigation had to be held in abeyance and as a result, full benefit of the first year's program could		
19. APPROVED BY AND DATE		
OFFICE	DEPUTY DIRECTOR	DDCI

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R & D Catalog Form (Continued)...

18. not be realized.

The currently funded effort has resulted in completion of the clean-room facility, installation of the HTA/5 processor and a detailed report on investigations carried on that did not require clean-room operation. During this time substantial progress has been made in meeting the objectives set forth and work will continue under the present contract until 30 June 1965. A modular processor concept was studied and recommendations detailed. Two different types of both liquid and air bearings were studied. Experimental models of both were built and functional performance testing started. Results thus far are inconclusive. An investigation was conducted to identify and measure pressure losses in plumbing which produced significant results. Work was started to develop methods of obtaining values for film tension, bearing loads and vacuum capstan torque. Erection of the clean-room was started 23 November 1964 and is scheduled for specification compliance testing at the end of February 1965.

The continuation program is intended to carry to a logical conclusion those efforts that will not be completed with current year funding, together with some new investigations. For this continuation the contractor has proposed a six month, level of effort to be carried out between 1 July 1965 and 31 December 1965. The following areas will be investigated:

1. Particle Contamination of Film -- An analytical study to determine the effect of foreign particles on the photographic interpretation of film transparencies. Particle size, grain structure, probability of information concealment and similar criteria will be studied to produce a mathematical statement on which the experimental program can be based.
2. Clean-room Experiments: Based on the criteria obtained in the Particle Contamination Analysis, controlled experimentation will be performed in the clean-room for evaluation of the theoretical results.
3. Air Bearing Design Evaluation: A continuation of the current effort. Designs will be evaluated for performance selection.
4. Liquid Bearing Design Evaluation: A continuation of the current effort. Designs will be evaluated for performance selection.
5. Testing of Air and Liquid Bearings: The HTA/5 Processor will be outfitted with mock-up tanks for functional testing of air and liquid bearings over a range of loads and speeds to determine capabilities.

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R & D Catalog Form (Continued)...

18.... 6. Vacuum Capstan Evaluation: A continuation of current effort. This will be expanded to include a design study to assess the problems involved in a modular capstan design incorporating its own power source. Time and funds permitting, an experimental capstan will be built and mounted on the HTA/5 take-up section for functional evaluation.

7. Air Squeegee Evaluation: Using the HTA/5 as a basic model, an evaluation of the operating criteria will be made. Varying air pressures and flow directions will be tested to determine the effects on water removal, film oscillation and efficiency.

Complete documentation of all effort will be submitted as monthly letter reports and final technical reports for each investigated area fully describing the study, the methods used, the conclusions and recommendations reached as a result of the work.

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